



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 8
999 18TH STREET - SUITE 300
DENVER, CO 80202-2466
<http://www.epa.gov/region08>

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APR 30 2001

Ref: 8P-SA

APR 26 2001

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Robert G. Card
President
Kaiser-Hill Company, L.L.C.
10808 Highway 93, Unit B
Golden, Colorado 80403-8200

Re: Modification: Rocky Flats Environmental
Technology Site, Permit No. CO-0001333

Dear Mr. Card:

Enclosed is the modified NPDES permit for the **Rocky Flats Environmental Technology Site**, National Pollutant Discharge Elimination System (NPDES) Permit No. **CO-0001333**. EPA received only one comment on the proposed modification. This comment was received from the Department of Energy. It related to correcting the effective date of the original permit and not with the substance of the modifications. EPA has made the requested change. The permit shall become effective May 1, 2001, unless, within thirty (30) days following the date the Department of Energy receives this permit, it petitions the Environmental Appeals Board (EAB) to review any conditions of this permit in accordance with the provisions of 40 CFR Section 124.19.

EPA recently published a final rule that has revised certain regulations pertaining to the NPDES program, including the procedures for appealing EPA determinations on NPDES permits. See Amendments to Streamline the National Pollutant Discharge Elimination System Program Regulations: Round II, 65 Fed. Reg. 30886 (May 15, 2000). Included in the rule are revisions to the permit appeals process that replace evidentiary hearing procedures with direct appeal to the EAB. The rule eliminates the evidentiary hearing process described at 40 CFR 124 Subpart E - Evidentiary Hearings for EPA-Issued NPDES Permits and EPA-Terminated RCRA Permits, as part of its appeals process for NPDES permits. See 40 CFR 124.19 of the revised regulations. (65 FR 30886, 30911).

The website for the EAB is "<http://www.epa.gov/eab/>." The webpage has a frequently asked questions section, "<http://www.epa.gov/eab/eabfaq.htm>." Questions 1 through 9 deal with filing issues. You may want to refer to this website for instructions on how to proceed in filing an appeal with EAB.

ADMIN RECORD



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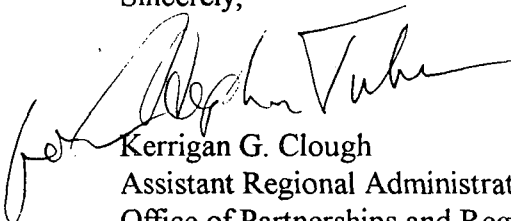
IA-A-002953

All pleadings filed by mail must be addressed to the Environmental Appeals Board, MC 1103B, U.S. EPA, Ariel Rios Building, 1200 Pennsylvania Avenue, N.W., Washington, D.C. 20460. Documents that are hand-carried must be delivered to the Board at its offices at 607 14th Street, N.W., Suite 500, Washington, D.C. 20005. Documents may be filed with the Clerk of the Environmental Appeals Board only between the hours of 8:30 a.m. and 4:30 p.m. Eastern Time Monday through Friday (excluding Federal holidays).

The preprinted Discharge Monitoring Report (DMR) forms for the enclosed permit are being processed and will be mailed to you before the due date of the first DMR. Your facility should use these forms to report all discharge data at the frequency required in your permit. If you have not received your DMR prior to the end of the first monitoring period please contact William Kennedy at (303) 312-6285.

If you have any questions regarding the monitoring requirements, schedules, or permit limitations, please direct them to Timothy Rehder at (303) 312-6293 or Michael Reed at (303) 312-6132.

Sincerely,



Kerrigan G. Clough
Assistant Regional Administrator
Office of Partnerships and Regulatory Assistance

Enclosures

cc: Colorado Department of Public Health and Environment
City of Broomfield
City of Westminster

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION VIII
999 18TH STREET, SUITE 300
DENVER, COLORADO 80202-2466

AUTHORIZATION TO DISCHARGE UNDER THE
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the provisions of the Clean Water Act, as amended, (33 U.S.C. §1251 et seq; the "Act"),

*U.S. Department of Energy - Golden, Colorado,
Kaiser-Hill Company, L.L.C., and
Rocky Flats Closure Site Services, L.L.C.*

are authorized to discharge from the Department of Energy's Rocky Flats Environmental Technology Site (formerly Rocky Flats Plant) located in sections 10 and 11, township 2 south, range 70 west, in Jefferson County, about 16 miles northwest of downtown Denver, to receiving waters named North Walnut Creek, South Walnut Creek, Walnut Creek Diversion Canal, Woman Creek, and the South Interceptor Ditch, a tributary of Pond C-2, in accordance with discharge point(s), effluent limitations, monitoring requirements and other conditions set forth herein. Authorization for discharge is limited to those outfalls specifically listed in this permit.

This permit shall become effective **October 27, 2000**,

This permit and the authorization to discharge shall expire at midnight,
September 30, 2005.

Signed this 25th day of April, 2001.

Authorized Permitting Official

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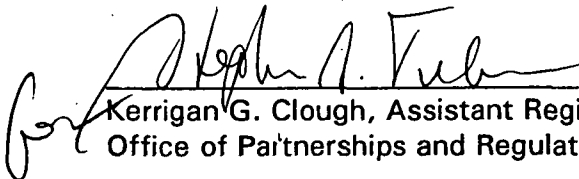

Kerrigan G. Clough, Assistant Regional Administrator
Office of Partnerships and Regulatory Assistance

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I. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

A. Definitions:

1. The "30-day (and monthly) average," other than for fecal coliform bacteria and total coliform bacteria, is the arithmetic average of all samples collected during a consecutive 30-day period or calendar month, whichever is applicable. Geometric means shall be calculated for fecal coliform bacteria and total coliform bacteria. The calendar month shall be used for purposes of reporting self-monitoring data on discharge monitoring report forms.
2. The "7-day (and weekly) average," other than for fecal coliform bacteria and total coliform bacteria, is the arithmetic mean of all samples collected during a consecutive 7-day period or calendar week, whichever is applicable. Geometric means shall be calculated for fecal coliform bacteria and total coliform bacteria. The 7-day and weekly averages are applicable only to those effluent characteristics for which there are 7-day average effluent limitations. The calendar week, which begins on Sunday and ends on Saturday, shall be used for purposes of reporting self-monitoring data on discharge monitoring report forms. Weekly averages shall be calculated for all calendar weeks with Saturdays in the month. If a calendar week overlaps two months (i.e., the Sunday is in one month and the Saturday in the following month), the weekly average calculated for that calendar week shall be included in the data for the month that contains the Saturday.
3. "Acute Toxicity" occurs when 50 percent or more mortality is observed for either species (See Part I.C.) at any effluent concentration. Mortality in the control must simultaneously be 10 percent or less for the effluent results to be considered valid.
4. "ALF" means the Action Levels and Standards Framework, attachment 5 of RFCA, which establishes agreed-upon action levels for environmental contaminants in surface water, ground water, and soils.
5. "ARA" means Assistant Regional Administrator, Region VIII, EPA. Unless otherwise noted, this refers to the ARA for the Office of Partnerships and Regulatory Assistance.
6. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility.
7. "Chronic toxicity" occurs when during a chronic toxicity test, the 25% inhibition concentration (IC_{25}) calculated on the basis of test organism survival and growth, or survival and reproduction, is less than or equal to the effluent dilution designated in this permit (see Part I.C.)

A. Definitions (Continued)

8. "Composite samples" shall be flow proportioned. The composite sample shall, as a minimum, contain at least four (4) samples collected over the compositing period. Unless otherwise specified, the time between the collection of the first sample and the last sample shall not be less than six (6) hours nor more than 24 hours. Acceptable methods for preparation of composite samples are as follows:
- Constant time interval between samples, sample volume proportional to flow rate at time of sampling;
 - Constant time interval between samples, sample volume proportional to total flow (volume) since last sample. For the first sample, the flow rate at the time the sample was collected may be used;
 - Constant sample volume, time interval between samples proportional to flow (i.e., sample taken every "X" gallons of flow); and,
 - Continuous collection of sample, with sample collection rate proportional to flow rate.
9. "Daily Maximum" ("Daily Max.") is the highest allowable discharge during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in units of mass, the daily discharge is calculated as the total mass of pollutants discharged over the calendar day. For pollutants with limitations expressed in other units of measurement, the daily discharge is calculated as the average measurement of the pollutant over the calendar day. If only one measurement or sample is taken during the calendar day, that will be considered the average for the calendar day.
10. "Director" means the EPA Regional Administrator or an authorized representative.
11. "DOE" means the United States Department of Energy.
12. "EPA" means the United States Environmental Protection Agency.
13. A "grab" sample, for monitoring requirements, is defined as a single "dip and take" sample collected at a representative point in the discharge stream.
14. "IC₂₅" (Inhibition concentration) is a point estimate of the toxicant concentration that would cause a 25% reduction in a nonlethal biological measurement of the test organism, such as reproduction or growth.
15. "IMP" means the Integrated Monitoring Plan developed pursuant to RFCA which establishes environmental monitoring requirements for surface water (including storm water), ground water, and soils.
16. An "instantaneous" measurement, for monitoring requirements, is defined as a single reading, observation, or measurement.

A. Definitions (Continued)

17. "Instantaneous Maximum" is the result of any single analysis and/or measurement.
18. "K-H" means Kaiser-Hill Company, L.L.C.
19. "NPDES" means National Pollutant Discharge Elimination System.
20. "NPDES Federal Facilities Compliance Agreement (FFCA)" is the March 1991 agreement between DOE and EPA entered into pursuant to Executive Order 12088.
21. "RFCA" means the Rocky Flats Cleanup Agreement, the three-party agreement establishing objectives and administrative procedures for the RCRA/CERCLA cleanup at RFETS.
22. "RFETS" means the Rocky Flats Environmental Technology Site.
23. "RFCSS" means Rocky Flats Closure Site Services, L.L.C.
24. "Section 313 Water Priority Chemical" means a chemical or chemical categories which: 1) are listed at 40 CFR 372.65 pursuant to Section 313 of the Emergency Planning and Community Right-to-Know Act (EPCRA) (also known as Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986); 2) are present at or above threshold levels at a facility subject of EPCRA Section 313 reporting requirements; and 3) that meet at least one of the following criteria: (i) are listed in Appendix D of 40 CFR 122 on either Table II (organic priority pollutants), Table III (certain metals, cyanides, and phenols) or Table V (certain toxic pollutants and hazardous substances); (ii) are listed as a hazardous substance pursuant to section 311(b)(2)(A) of the CWA at 40 CFR 116.4; or (iii) are pollutants for which EPA has published acute or chronic water quality criteria.
25. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.
26. "STP" means the sewage treatment plant.
27. "Sewage Sludge" is any solid, semi-solid or liquid residue generated during the treatment of domestic sewage in a treatment works. Sewage sludge includes, but is not limited to, domestic septage; scum or solids removed in primary, secondary or advanced wastewater treatment processes; and a material derived from sludge. Sewage sludge does not include ash generated during the firing of sewage sludge in a sewage sludge incinerator or grit and screenings generated during preliminary treatment of domestic sewage in a treatment works.
28. "TTO" means total toxic organics, which is the summation of all quantifiable values greater than 0.01 mg/L for the organic compounds listed in Table II of Appendix D of 40 CFR 122.

A. Definitions (Continued)

29. "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the permittees. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

B. Description of Discharge Point(s)

The authorization to discharge provided under this permit is limited to those outfalls specifically designated below as discharge locations. Discharge at any location not authorized under an NPDES permit is a violation of the Clean Water Act and could subject the person(s) responsible for such discharge to penalties under Section 309 of the Act. Knowingly discharging from an unauthorized location or failing to report an unauthorized discharge within a reasonable time from first learning of an unauthorized discharge could subject such person to criminal penalties as provided under the Clean Water Act.

<u>Outfall Numbers</u>	<u>Description of Discharge Points</u>
STP1	The outfall from the sewage treatment plant (STP), located at Building 995, prior to the mixture with the receiving stream, known as South Walnut Creek, at the point of discharge into Pond B-3 (Big Dry Creek Segment 5). Use of STP1 as the primary discharge point is expected to continue throughout the remaining life of the STP.
008	The storm water discharge from the area outlined on Sheet 2 (Basin SW022) of the maps in the Form 2F application submitted October 1, 1992, located at the point where Central Avenue Ditch crosses the outer industrial area security fence.
GS10	The storm water discharge from the area outlined on sheet 3 (Basin SW023) of the maps in the Form 2F application submitted October 1, 1992, located on South Walnut Creek upstream of Pond B-1.
010	The storm water discharge from the area outlined on Sheet 4 (Basin SW027) of the maps in the Form 2F application submitted October 1, 1992, located at the downstream end of the south interceptor ditch.
011	The storm water discharge from the area outlined on Sheet 5 (Basin SW093) of the maps in the Form 2F application submitted October 1, 1992, located on North Walnut Creek at a point upstream of Pond A-1. This area receives any storm water discharge from Outfall 012.
014	This is a point where internal effluent limitations apply and is the discharge of product water from the evaporators in building 374. The point of compliance is following the evaporator(s) and prior to routing the water to the cooling tower makeup water system or to the boiler feedwater system.

C. Specific Limitations and Self-Monitoring Requirements

1. Effluent Limitations - Outfall STP1

Through the life of this permit, the quality of effluent discharged by the STP shall, as a minimum, meet the limitations as set forth in Table 1 below. Note that the values shown in parentheses are temporary modifications. These will be the applicable effluent limitations where shown, until such time as the temporary modifications are removed or altered by the Water Quality Control Commission.

Percentage Removal Requirements (Total Suspended Solids and CBOD₅ Limitation):
In addition to the concentration limitation on total suspended solids and CBOD₅, the arithmetic mean of the total suspended solids and CBOD₅ concentration for effluent samples collected in a period of thirty (30) consecutive days shall not exceed fifteen (15) percent of the arithmetic mean of the concentration for influent samples collected at approximately the same times during the same period (85 percent removal).

Effective immediately and continuing until three (3.0) years from the effective date of this permit, there shall be no acute toxicity in the discharge from Outfall STP1.

Effective three (3.0) years from the effective date of this permit there shall be no chronic toxicity in the discharge from Outfall STP1.

C. Specific Limitations and Self-Monitoring Requirements (Continued)

Table 1 - Effluent Limitations - Outfall STP1

Effluent Characteristic	30-Day Ave. a/	7-Day Ave. a/	Daily Max. a/	PQL b/
Flow, MGD	0.5	N/A	N/A	
pH, s.u.	N/A	N/A	6.5-9.0	
CBOD ₅ , mg/L - (Carbonaceous BOD ₅)	8.0	N/A	20	
Total Suspended Solids, mg/L	15	N/A	25	
Fecal Coliforms, no./100 mL	200	400	N/A	
Oil and Grease, mg/L	N/A	N/A	10	
Nitrite as Nitrogen, mg/L	N/A	N/A	(4.5)	
Total Phosphorus, mg/L	8	N/A	12	
Chromium, TR, ug/ d/	N/A	N/A	50	
Chromium, Hexavalent, Dissolved, ug/L	11	N/A	16	
Silver, Potentially Dissolved, ug/l c/	0.6	N/A	3.8	
Gross Alpha, pCi/L	11	N/A	N/A	
Gross Beta, pCi/L	19	N/A	N/A	
Benzene, ug/L	(5)	N/A	N/A	1.0
Carbon tetrachloride, ug/L	(5)	N/A	N/A	1.0
Dichloroethane, 1,2-, ug/L	(5)	N/A	N/A	1.0
Dichloroethylene, 1,1-, ug/l	(7)	N/A	N/A	1.0
Dichloroethylene, 1,2-, ug/L	70	N/A	N/A	1.0
Tetrachloroethylene, ug/L	(5)	N/A	N/A	1.0
Trichloroethane 1,1,1, ug/L	200	N/A	N/A	
Trichloroethylene, ug/L	(5)	N/A	N/A	

See pages 14-16 for footnotes

2. Self-Monitoring Requirements - Outfall STP1

As a minimum, upon the effective date of this permit, the following constituents shall be monitored at the frequency and with the type of measurement indicated; samples or measurements shall be representative of the volume and nature of the monitored discharge. If no discharge occurs during the entire monitoring period, it shall be stated on the Discharge Monitoring Report Form (EPA No. 3320-1) that no discharge or overflow occurred.

Effluent samples shall be collected at the v-notched weir following the ultraviolet disinfection treatment process.

C. Specific Limitations and Self-Monitoring Requirements (Continued)

Table 2 - Self-Monitoring Requirements - Outfall STP1

Effluent Characteristic	Frequency	Sample Type <u>a/</u>
Total Flow, MGD <u>e/</u>	Continuously	Recorder <u>e/</u>
CBOD ₅ , mg/L <u>f/</u>	2/Week	Composite
Total Suspended Solids, mg/L <u>f/</u>	2/Week	Composite
Fecal Coliforms, no./100 mL	2/Week	Grab
Nitrate as Nitrogen, mg/L	2/Week	Composite
Nitrite as Nitrogen, mg/L	2/Week	Grab
Ammonia, as Nitrogen, mg/L	2/Week	Composite
Total Phosphorus, mg/L	2/Week	Composite
Oil and Grease, Visual	Daily	Observation
Oil and Grease, mg/L	<u>g/</u>	Grab
pH, s.u.	Daily	Grab
Alkalinity as CaCO ₃ , mg/L <u>k/</u>	2/week <u>k/</u>	Composite
Chromium, TR, ug/L <u>d/</u>	2/Month	Composite
Chromium, Hexavalent, Dissolved, ug/L	Quarterly <u>m/</u>	Grab
Silver, Potentially Dissolved, ug/L	Weekly	Composite
Gross Alpha, pCi/L	2/Month	Composite
Gross Beta, pCi/L	2/Month	Composite
Americium, pCi/L	<u>1/</u>	<u>1/</u>
Plutonium, pCi/L	<u>1/</u>	<u>1/</u>
Tritium, pCi/L	<u>1/</u>	<u>1/</u>
Uranium, pCi/L	<u>1/</u>	<u>1/</u>
Benzene, ug/L	1/Month <u>h/</u>	Grab
Carbon Tetrachloride, ug/L	1/Month <u>h/</u>	Grab
Dichloroethane, 1,2-, ug/L	1/Month <u>h/</u>	Grab
Dichloroethylene, 1,1-, ug/L	1/Month <u>h/</u>	Grab
Dichloroethylene, 1,2-, ug/L (trans)	1/Month <u>h/</u>	Grab
Tetrachloroethylene, ug/L	1/Month <u>h/</u>	Grab
Trichloroethane, 1,1,1-, ug/L	1/Month <u>h/</u>	Grab
Trichloroethylene, ug/L	1/Month <u>h/</u>	Grab
Whole Effluent Toxicity (WET)-Acute Whole Effluent Toxicity (WET)-Chronic	Quarterly <u>I/</u> See Part I.C.5. & 6.	Composite

See pages 14-16 for footnotes.

C. Specific Limitations and Self-Monitoring Requirements (Continued)

3. Building 374 - Internal Outfall 014

Effective immediately and lasting through the life of this permit, the quality of effluent discharged through outfall 014 shall qualify for the "commercial product" exclusion from the category of solid waste as described in 40 CFR Section 261.2(e)(1)(ii).

Effective immediately, the evaporator in Building 374 shall be operated in accordance with current operating procedures and with the objective of keeping the daily maximum conductivity of the discharge less than 150 umhos/cm at 25°C.

The discharge through outfall 014 shall consist only of product water from the evaporator(s) in Building 374. The discharge through outfall 014 shall be routed only to the cooling tower makeup water system or the boiler feedwater system and/or the sanitary sewer system unless prior approval is granted by the permit issuing authority.

Effective immediately, the product water from the evaporator must be diverted back to the feed tank whenever any of the following conditions exist:

- a. Observations of the conductivity meter indicate the conductivity of the product water from the evaporator is at a level greater than 150 umhos/cm for more than 5 minutes; or,
- b. The conductivity meter is not operating.

The permittees shall minimize the routing to Building 374 of any wastewaters that are contaminated with organics (e.g., solvents, oil, etc.). Detergents in wastewater from laundry operations are acceptable for routing to Building 374. Within six (6) months of the effective date of this permit the permittees shall develop and implement a plan that requires all operations at RFETS Flats that contribute wastewaters to Building 374 to have appropriate policies and/or procedures to "screen out" those wastewaters that contain organics and route those wastewaters for proper disposal somewhere other than to Building 374. The plan may incorporate existing practices, as appropriate. The results of the monitoring required in Part I.C.4. shall be used as an indication of the adequacy of the screening program.

C. Specific Limitations and Self-Monitoring Requirements (Continued)

4. Building 374 - Internal Outfall 014 Monitoring Requirements

As a minimum, upon the effective date of this permit, the permittees shall conduct the monitoring program developed pursuant to the letter of August 22, 1989, from Edward S. Goldberg (DOE) and Dominick J Sanchini (Rockwell International) to Frederick R. Dowsett (Colorado Department of Health), which is described in the enclosure to a letter dated June 25, 1992 from J.M. Kersh, Associate General Manager, Environmental and Waste Management, EG&G Rocky Flats, to Terry A. Vaeth, Manager, DOE, RFO. The monitoring plan is subject to change as provided within the plan to ensure that the "commercial product" RCRA exclusion is met.

The permittees shall submit an annual report to both EPA and the State of Colorado Department of Public Health and Environment summarizing the results of analyses of such monitoring during the calendar year, including the following calculation regarding conductivity of the discharge:

- i. the maximum conductivity observed during each month;
- ii. the time-weighted average conductivity during each month;
- iii. the number of times the conductivity exceeded 150 umhos/cm at 25°C for a duration of more than 5 minutes during each month;
- iv. if the conductivity exceeded 150 umhos/cm at 25°C for a duration of more than 5 minutes; give the longest period of time during each month; and,
- v. the total length of time the conductivity exceeded 150 umhos/cm at 25°C during each month.

In addition, the annual report shall include an annual certification that the evaporator effluent has met the quality requirements for the "commercial product" Resource Conservation Recovery Act (RCRA) exclusion described in 40 CFR Section 261.2(e)(1)(ii) during the previous calendar year. The annual report shall be in the form of a letter with attachments and shall be submitted by no later than April 1 of the following year.

In the event that the quality requirements for the "commercial product" exclusion are not met, the permittees shall notify EPA and the State of Colorado Department of Public Health within twenty-four hours.

See Part II.H for additional requirements on twenty-four hour notice of noncompliance reporting and Part III.I. for requirements on notification and annual report on non-sanitary wastes.

Annual reporting and certification of the monitoring done under Part I.C.4 of this permit will be the only requirements for B374 liquid operations and effluent under this permit.

C. Specific Limitations and Self-Monitoring Requirements (Continued)

FOOTNOTES:

- a/ See Definitions, Part I.A. for definition of terms.
- b/ Practical Quantification Level (PQL). The analysis for the pollutant must be done in a manner which allows quantification down to the PQL value. For purposes of calculating averages and reporting on the discharge monitoring report form, analytical values less than the PQL values shall be considered to be zero.
- c/ PD means potentially dissolved as given by the following definition in the State of Colorado's "Basic Standards and Methodologies for surface Water, 3.1.0":
"Potentially Dissolved Metals" means that portion of a constituent measured from the filtrate of a water and suspended sediment sample that was first treated with nitric acid to a pH of 2.0 or less and let stand for 8 to 96 hours prior to sample filtration using a 0.4 or 0.45-um membrane filter. Note the "Potentially Dissolved" method cannot be used where nitric acid will interfere with the analytical procedure.
- d/ TR means total recoverable.
- e/ Flow measurements of effluent volume shall be made in such a manner that the permittees can affirmatively demonstrate that representative values are being obtained. The average flow rate (in million gallons per day (MGD)) during the reporting period and the daily maximum flow (maximum volume, in million gallons, discharged during a 24-hour period) shall be reported.
- f/ The influent to the sewage treatment plant shall be monitored for this pollutant at the same frequency and the same type of sample as required for the effluent.
- g/ If a visible sheen is observed, a grab sample shall be promptly collected and analyzed for oil and grease.
- h/ Samples collected once per month shall be taken during normal operations. An additional sample shall be taken to represent each period of five days or more during which non-storm waters are being discharged to the STP under the provisions of Part I.C.13 of this permit.
- i/ Quarterly samples shall be collected during the months of January, April, July, and October, if a continual discharge occurs. If the discharge occurs on an intermittent basis, the quarterly sample shall be collected during the period when that intermittent discharge occurs.
- j/ The total volume (in gallons) of water discharged during the reporting period, the average flow rate (in gallons per operating day) during the reporting period and the daily maximum flow (maximum volume, in gallons, discharged during a 24-hour period) shall be reported.

C. Specific Limitations and Self-Monitoring Requirements

FOOTNOTES: (Continued)

- k/ Alkalinity samples shall be collected at the same time that the ammonia samples are collected.
- l/ No NPDES effluent limitations or monitoring requirements are being imposed for these constituents. Monitoring for americium, plutonium, tritium, and uranium shall be conducted, reported, and the results evaluated and enforced in accordance with the ALF action Level and standards for surface water, and other applicable provisions of RFCA. Source evaluation and mitigating actions are part of the RFCA compliance requirements and enforcement procedures. RFCA Attachment 5 will be revised to establish a Point of Evaluation for monitoring these constituents below the v-notch weir following the STP disinfection process. See RFCA, RFCA Attachment 5 (particularly paragraph 2.2.C.2) and the Statement of Basis for this permit for further details on RFCA compliance requirements and enforcement procedures.
- m/ Quarterly sampling for hexavalent chromium is required to start within two weeks of total chromium values being reported in excess of 11ug/L. Sampling may cease only after total chromium results have remained below 11ug/L for four consecutive quarters.

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C. Specific Limitations and Self-Monitoring Requirements

5. Whole Effluent Toxicity Testing - Acute Toxicity (Outfall STP 1)

Starting in the first full calendar quarter after the effective date of the permit and continuing until three years from the effective date of this permit, permittees shall, at least once each calendar quarter, conduct acute static replacement toxicity tests on a composite sample of the discharge. Quarterly samples shall be collected on a two day progression; i.e., if the first quarterly sample is on a Monday, during the next quarter, sampling shall be on a Wednesday, etc.

The replacement static toxicity tests shall be conducted in accordance with the procedures set out in the latest revision of "Methods for Measuring the Acute Toxicity of Effluents to Freshwater and Marine Organisms", EPA-600/4-90/027F (Rev. August 1993) and the "Region VIII EPA NPDES Acute Test Conditions -Static Renewal Whole Effluent Toxicity Test". In the case of conflicts, the Region VIII Document will prevail. The permittees shall conduct an acute 48-hour static toxicity test using *Ceriodaphnia dubia* and an acute 96 hour static toxicity test using *Pimephales promelas*.

Acute toxicity occurs when 50 percent or more mortality is observed for either species at any effluent concentration. If more than 10 percent control mortality occurs, the test shall be repeated until satisfactory control survival is achieved.

If acute toxicity occurs, an additional test shall be conducted within two weeks of the date of when the permittees learned of the test failure. If only one species fails, retesting may be limited to this species. Should acute toxicity occur in the second test, testing shall occur once a month until further notified by the permit issuing authority.

C. Specific Limitations and Self-Monitoring Requirements

5. Whole Effluent Toxicity Testing - Acute Toxicity (Outfall STP 1) (Continued)

Quarterly test results shall be reported along with the Discharge Monitoring Report (DMR) submitted for the end of the reporting calendar quarter (e.g., whole effluent results for the calendar quarter ending March 31 shall be reported with the DMR due April 28, with the remaining reports submitted with DMRs due each July 28, October 28, and January 28). Monthly test results shall be reported along with the DMR submitted for that month. The format for the report shall be consistent with the latest revision of the "Region VIII Guidance for Acute Whole Effluent Reporting", and shall include all chemical and physical data as specified.

6. Whole Effluent Toxicity Testing - Chronic Toxicity (Outfall STP 1)

Starting in the first full calendar quarter after the effective date of the permit and continuing until three years from the effective date of this permit, the permittees shall, at least once during the six month period from January through June, and at least once during the six month period from July through December, conduct chronic short term toxicity tests on a composite sample of the final effluent. If only two samples are taken, the interval between samples shall be at least three months. Starting three years after the effective date of this permit, the frequency of testing shall be increased to quarterly. The samples shall be collected on a two day progression; i.e., if the first quarterly sample is on a Monday, during the next quarter, sampling shall be on a Wednesday.

If chronic toxicity is detected, an additional test shall be conducted within two weeks of the date of when the permittees learned of the test failure. The need for any additional samples shall be determined by the permit issuing authority.

The chronic toxicity tests shall be conducted in accordance with the procedures set out in the latest revision of "Short Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms", EPA/600-4-91-002, and the "Region VIII EPA NPDES Chronic Test Conditions - Static Renewal Whole Effluent Toxicity Test". In case of conflicts, the Region VIII procedure will prevail. Test species shall consist of *Ceriodaphnia dubia* and *Pimephales promelas*. If acceptable control performance criteria are not met, the test shall be considered invalid. Chronic toxicity occurs when during a chronic toxicity test, the 25% inhibition concentration (IC_{25}) calculated on the basis of test organism survival and growth or survival and reproduction, is less than or equal to 100% effluent dilution.

Test results shall be reported with the Discharge Monitoring Report (DMR) submitted for the end of the calendar period during which the whole effluent test was run (e.g. results shall be reported with the next routine DMR covering the month in which the sample was taken). The format for the report shall be consistent with the latest revision of the "Region VIII Guidance for Chronic Whole Effluent Reporting", and shall include all the physical and chemical testing as specified.

C. Specific Limitations and Self-Monitoring Requirements (Continued)

7. Whole Effluent Toxicity Testing - (TIE-TRE)

Should acute toxicity and/or chronic toxicity be detected in the permittees' discharge, a Toxicity Reduction Evaluation (TRE)/Toxicity Identification Evaluation (TIE) shall be undertaken by the permittees to establish the cause of the toxicity, locate the source(s) of the toxicity, and develop control of, or treatment for the toxicity. Failure to initiate, or conduct an adequate TIE-TRE, or delays in the conduct of such tests, shall not be considered a justification for noncompliance with the whole effluent toxicity limits contained in Part I.C.1. of this permit. A TRE plan needs to be submitted to the permitting authority within 45 days after confirmation of the continuance of effluent toxicity. Once a TRE-TIE has begun, quarterly progress reports shall be submitted to the permitting authority.

8. Toxicity Limitation-Modification Provision.

This permit may be modified (following proper administrative procedures) to include a new compliance date, additional or modified numerical limitations, a new or different compliance schedule, a change in the whole effluent protocol, or any other conditions related to the control of toxicants if one or more of the following events occur:

- a. Toxicity was detected late in the life of the permit near or past the deadline for compliance.
- b. The TRE results indicate that compliance with the toxic limits will require an implementation schedule past the date for compliance and the permit issuing authority agrees with the conclusion.
- c. The TRE results indicate that the toxicant(s) represent pollutant(s) that may be controlled with specific numerical limits, and the permit issuing authority agrees that numerical controls are the most appropriate course of action.
- d. Following the implementation of numerical controls on toxicants, the permit issuing authority agrees that a modified whole effluent protocol is necessary to compensate for those toxicants that are controlled numerically.
- e. The TRE reveals other unique conditions or characteristics which, in the opinion of the permit issuing authority, justify the incorporation of unanticipated special conditions in the permit.

C. Specific Limitations and Self-Monitoring Requirements (Continued)

9. Influent Monitoring and Inspection for Spill Containment and Operational Control

The permittees shall monitor the influent to the sewage treatment plant for conditions that could indicate that a spill to the sanitary sewer system has occurred and/or substances have been discharged to the sanitary sewer system that could cause operational problems at the sewage treatment plant and/or result in the discharge of excessive amounts of pollutants. At a minimum, the influent to the sewage treatment plant shall be monitored for the following:

- a. Conductivity, umhos/cm at 25°C;
- b. pH, s.u.;
- c. Lower explosive level (LEL) of the atmosphere above the flow equalization basin;
- d. Visual observation of either the on-line flow equalization basin and/or the flow at the headworks of the sewage treatment plant for unusual conditions such as color, excessive foam, odors, oil sheen, etc.; and
- e. Oxygen uptake rate of a grab sample taken at the headworks of the sewage treatment plant.

The monitoring for conductivity, and lower explosive level shall be done continuously to the maximum extent practical. When monitoring cannot be done continuously due to equipment maintenance, etc., at least one reading shall be taken each day based on a grab sample from the on-line flow equalization basin or the flow at the headworks of the sewage treatment plant. For purposes of this permit, routine calibration of monitoring equipment is not considered a break in continuous monitoring. If continuous monitoring does not occur for more than two days during a calendar month, a written explanation shall be submitted along with the discharge monitoring report form for that month. The explanation shall include the length of time that continuous monitoring did not occur during the month, the reason for the break in continuous monitoring, and if continuous monitoring has not resumed, when it is expected to start again.

The monitoring for oxygen uptake rate and the visual observation of the on-line flow equalization basin and/or the flow at the headworks of the sewage treatment plant shall be done at least once each operating shift.

The methods for monitoring conductivity, pH, lower explosive level, and oxygen uptake shall be in accordance with the latest edition of Standard Methods for the Examination of Water and Wastewater, the latest edition of American Society of Testing Materials, or a method approved in writing by the permit issuing authority.

C. Specific Limitations and Self-Monitoring Requirements

**9. Influent Monitoring and Inspection for Spill Containment and Operational Control
(Continued)**

A record shall be kept of all monitoring results. The recording of results shall be in a bound book(s) in accordance with good recording keeping practices. At a minimum, for conductivity, pH, and lower explosive level, the maximum and minimum values observed during the 24-hour period shall be recorded. For the visual observations, any unusual observations shall be noted, otherwise indicate that conditions appeared normal. The results of the oxygen uptake rate tests shall be recorded. If the continuous monitoring does not occur, that should be noted and the reason given. Any corrective actions taken as the result of the monitoring shall be noted. The record shall be maintained at the sewage treatment plant and made available for inspection upon request by authorized representatives of the EPA or the Colorado Water Quality Control Division.

Within six (6) months of the effective date of this permit, the permittees shall develop and implement a plan for how to respond to abnormal readings and/or observations from the above required influent monitoring and inspection. The plan shall identify an action level for each type of influent monitoring (e.g., LEL exceeds 3%) and the response action to be taken. The response action may be a series of action steps that may be terminated as conditions warrant. The plan shall be modified and updated as indicated by operating experience and changes in conditions. The plan shall be made available for inspection upon request by authorized representatives of the EPA or the Colorado Water Quality Control Division.

Within (12) months of the effective date of this permit, the permittees shall complete and report to the director the results of a feasibility study for improving monitoring of radionuclides in the STP influent. A search shall be made of major universities, research centers, and laboratories, to determine the availability of methods that could provide faster, more accurate analytical results suitable for use in identifying off-normal events and assisting in operational control. A determination shall be made as to the viability of methods identified and the efforts that would be required to make them available for use in routine monitoring at RFETS.

10. Sewage Sludge Requirements

- a. The permittees shall handle and dispose of sewage sludge in such a manner so as to protect public health and the environment.
- b. Unless otherwise approved by the NPDES sludge permitting authority, the sludge from the sewage treatment plant shall be dried, boxed, temporarily stored if necessary, and disposed of at a Department of Energy's low-level radioactive waste disposal facility in accordance with the applicable requirements of the Department of Energy.

C. Specific Limitations and Self-Monitoring Requirements

10. Sewage Sludge Requirements (Continued)

- c. If at such time the permittees want to dispose of the sludge from the sewage treatment plant in some other manner, the permittees shall submit to the NPDES sludge permitting authority a written request for authorization to dispose of the sludge by another method. The request shall describe the proposed method of disposal and shall be submitted at least 180 days prior to the planned date of implementation.
- d. If the permittees wish to demonstrate or field test the feasibility of land application at RFETS (including but not limited to reclamation) the permittees shall obtain prior approval from the permitting authority. At least 90 days prior to the anticipated date for the demonstration, a design shall be submitted to the permitting authority's Biosolid Management Program for review and comment. The application of sewage sludge shall not begin until approval is granted by the permitting authority. At a minimum the design shall contain a description of the project including but not limited to:
 - 1) the location and background information (e.g., soil types, soil analysis, elevation, slope);
 - 2) how site preparation will be completed;
 - 3) statement of how the land application provisions of 40 CFR 503 will be met;
 - 4) the sewage sludge application rates selected as well as the reasoning for the application rates selected;
 - 5) how seeding and initial growth will be monitored;
 - 6) interim and final reports shall be submitted to the permitting authority.
- e. For each calendar year, starting with the year this permit is issued, the permittees shall submit to EPA and the State of Colorado a report summarizing sludge quantities and quality. The reports are due by February 19 of the following year. The reports may be submitted as an attachment to a letter. As a minimum, the report shall contain the following information:
 - 1) The total amount of sludge produced at the sewage treatment plant during the year;
 - 2) The total amount of sludge placed into temporary storage during the year;
 - 3) The total amount of sludge disposed of as a low level radioactive waste or otherwise during the year;
 - 4) A listing of each disposal site and the amount of sludge sent to that site during the year; and
 - 5) A summary of the analytical data for all analyses of the sludge for the pollutants listed in Table 1 of 40 CFR 503.13. At least one sample per year shall be analyzed for all of the pollutants listed in Table 1 of 40 CFR 503.13. The number of samples and the average and maximum concentrations for each pollutant shall be listed. The concentrations shall be given in milligram of pollutant per kilogram of dry sludge (mg/kg). The amounts of sludge shall be reported in terms of dry weight and in metric tons.

C. Specific Limitations and Self-Monitoring Requirements (Continued)

11. Employee Awareness, Training, and Spill Control Programs

Within six (6) months of the effective date of this permit, the permittees shall demonstrate that an adequate program of employee awareness, training, and spill control is in place. The program shall include the training of appropriate employees in the procedures for the proper disposal of wastes; spill prevention; proper spill containment and cleanup procedures; and the importance of keeping inappropriate wastes out of the sanitary sewer system. Existing programs and operator certifications may be cited in making this demonstration. The program shall be reviewed at least every two years and modified as considered appropriate.

12. Storage Tanks for Spills and Unacceptable Quality Water

Within 6 months of the effective date of this permit, the permittees shall submit to the permit issuing authority either: (1) a contingency plan for treating and disposing of unacceptable quality water that has been routed to the storage tanks or; (2) a comprehensive set of work instructions which, in aggregate, meet the requirements for such a plan. The plan shall address possible situations where the water is contaminated with excessive amounts of organics, heavy metals, and/or radionuclides. Treatment options should include treatment at the storage facility, treatment in the industrial waste treatment system (e.g., Building 374), and treatment at the STP. The plan should also include proposed methods of disposing of the water after applicable treatment is provided. The permittees shall implement the plan within six months after approval by the permit issuing authority.

13. Contaminated Non-Storm Water Discharges

Non-storm waters (also called incidental waters) that are determined to meet the stream standards for Big Dry Creek Segment 5 will be considered uncontaminated and may be discharged in accordance with section I.C.15.c.3.g.

The decision on the disposition of contaminated non-storm water (CNSW) discharges (water which does not meet the stream standards for Big Dry Creek Segment 5) shall be made in accordance with the Industrial Area IM/IRA and the Incidental Waters Plan. A record shall be kept of disposition decisions which documents the factors considered in making the decision and includes the field screening, analytical, or historical information on which the determination was based. These records shall be maintained at a central location and be made available to the permitting authority on request.

If the decision is made not to treat a given quantity of CNSW in a CERCLA treatment unit, the water may be treated at the sewage treatment plant (STP) provided that the following conditions are met:

C. Specific Limitations and Self-Monitoring Requirements

13. Contaminated Non-Storm Water Discharges (Continued)

- a. The concentration of total toxic organics (TTO) in CNSW discharged to the STP shall not exceed 2.1 mg/L. Disposition records must demonstrate that this limitation is being met, either through field screening, analytical, or historical information, or some combination thereof. Small quantities of incidental waters may be combined and/or sampled as a composite, as appropriate. If the concentration of TTO exceeds 2.1 mg/L, the CNSW shall be pretreated to reduce the concentration of TTO to less than 2.1 mg/L prior to discharge to the sanitary sewer system and/or the STP;
- b. The quantity, in grams per day, of any of the volatile organic compounds listed below in the table of "Volatile Organics of Concern" contained in CNSW discharged to the STP shall not exceed the value listed under the column "Permissible Mass." Monitoring or other documentation demonstrating that this requirement is being met must be included in disposition records.

Table 5 - VOLATILE ORGANICS OF CONCERN

Organics	Water Quality Standards, ug/L	Permissible Mass, grams/day
Benzene	5	27.2
Carbon tetrachloride	5	21.8
Chloroform	100	217.6
Dichloroethane, 1,2-	5	5.4
Dichloroethylene, 1,1-	7	61
Methylene chloride	5.7	6.2
Tetrachloroethylene	5	14.5
Trichloroethylene	5	31

- c. The total volume of CNSW that may be discharged to the sanitary sewer system and/or directly to the STP shall not exceed 10,000 gallons per 24 hour period. Flows shall be metered or measured by appropriate methods and recorded. This water shall be discharged to the sanitary sewer system at a relatively uniform rate over at least an 8-hour period. "Slug discharges" of CNSW to the sanitary sewer system and/or the STP are to be avoided; and

C. Specific Limitations and Self-Monitoring Requirements

13. Contaminated Non-Storm Water Discharges (Continued)

d. The CNSW discharged to the sanitary sewer system and/or the STP shall be monitored at the minimum rate of one sample per 25,000 gallons for the constituents that are known or suspected to be present in concentrations greater than the applicable water quality standards for segment 5 of the Big Dry Creek Basin, based on field screening, previous data, source identification, and process knowledge. A record shall be maintained of the following information about the CNSW discharged to the sanitary sewer system and/or the STP: the sources of the water; the daily amount discharged; field screening data; analytical monitoring results; and other comments, as appropriate. For each month there is a discharge of CNSW to the sanitary sewer system and/or the STP, the following information shall be submitted as an attachment to a letter, along with the discharge monitoring report form due for that month:

- 1) The total volume of CNSW discharged per day;
- 2) The source(s) of those waters;
- 3) The average and maximum values of all analytical monitoring data available as of the DMR date; and
- 4) Explanatory comments as appropriate, including identification of delayed data to be included in the subsequent month's DMR.

14. Ammonia Study Requirements

The permittees shall make available such ammonia data and related information as generated by the ongoing studies of ammonia concentration in the Big Dry Creek Basin being conducted by downstream water users and other entities such as the Big Dry Creek Watershed Association. The findings of these studies will be utilized for determining the appropriate effluent limitations on ammonia from the sewage treatment plant in order to meet appropriate water quality standards in downstream reaches. In order to support this determination, the permittees shall submit an annual letter-report to the director summarizing the status of the Big Dry Creek ammonia studies and presenting relevant findings and recommendations on the further monitoring or possible control of ammonia loading from RFETS. The reports shall be for the calendar year and shall be submitted by March 31 of the following year. The first report is due by March 31, 2001.

C. Specific Limitations and Self-Monitoring Requirements (Continued)

15. Storm Water Pollution Prevention Plans

The permittees shall continue to implement all existing best management practices (BMP) that may affect the quality of storm water runoff unless those BMPs are modified or replaced by the storm water pollution prevention plan required below. The permittees shall develop a storm water pollution prevention plan for the Rocky Flats Environmental Technology Site. The storm water pollution prevention plan shall be prepared in accordance with good engineering practices and in accordance with the factors outlined in 40 CFR 125.3(d)(2) or (3) as appropriate. The plan shall identify potential sources of pollution which may reasonably be expected to affect the quality of storm water discharges associated with industrial activity from the facility. In addition, the plan shall describe and ensure the implementation of practices which are to be used to reduce the pollutants in storm water discharges associated with industrial activity at the facility and to assure compliance with the terms and conditions of this permit. The facility must implement the provisions of the storm water pollution prevention plan required under this Part as a condition of this permit.

a. Deadlines for Plan Preparation and Compliance.

1) The plan for a storm water discharge:

- a) Shall be prepared and submitted to the permit issuing authority for review no later than six months after the effective date of this permit (and updated at a minimum of every two years or more frequently if deemed appropriate). A copy of the plan shall also be submitted to the Colorado Department of Public Health and Environment (CDPHE); and,
- b) Shall provide for implementation and compliance with the terms of the plan on or before six months after the plan is submitted. Portions of the plan requiring construction may take up to three years after the effective date of the permit for implementation. A construction schedule shall be included in the plan when construction taking more than six months is required.

2) Upon a showing of good cause, the permit issuing authority may establish a later date in writing for preparation, implementation, and compliance with the plan.

3) Except as provided in Part I.C.15.a.1)b) above, the plan shall be implemented in accordance with the approval of the permit issuing authority no later than one year after the effective date of this permit unless the permit issuing authority approves a later date.

C. Specific Limitations and Self-Monitoring Requirements (Continued)

15. a. 4) The permit issuing authority may notify the permittees at any time that the plan does not meet one or more of the minimum requirements of this Part. Such notification shall identify those provisions of the permit which are not being met by the plan, and identify which provisions of the plan require modifications in order to meet the minimum requirements of this Part. Within 30 days of such notification from the permit issuing authority, (or as otherwise provided by the permit issuing authority), the permittees shall make the required changes to the plan and shall submit to the permit issuing authority a written certification that the requested changes have been made.

b. Keeping Plans Current - The permittees shall amend the plan whenever there is a change in design, construction, operation, or maintenance, which has a significant effect on the potential for the discharge of pollutants to the waters of the United States or if the storm water pollution prevention plan proves to be ineffective in eliminating or significantly minimizing pollutants from sources identified under Part I.C.15.c.2) (description of potential pollutant sources) of this permit, or in otherwise achieving the general objectives of controlling pollutants in storm water discharges associated with industrial activity. Amendments to the plan shall be submitted for review to the permit issuing authority in the same manner as Part I.C.15.a.1).a). (above).

c. Contents of Plan - The plan shall include, at a minimum, the following items:

1) Pollution Prevention Team - The plan shall identify a specific individual or individuals within the facility organization as members of a storm water Pollution Prevention Team that are responsible for developing the storm water pollution prevention plan and assisting the facility or plant manager in its implementation, maintenance, and revision. The plan shall clearly identify the responsibilities of each team member. The activities and responsibilities of the team shall address all aspects of the facility's storm water pollution prevention plan.

2) Description of Potential Pollutant Sources - The plan shall provide a description of potential sources which may reasonably be expected to add significant amounts of pollutants to storm water discharges or which may result in the discharge of pollutants during dry weather from separate storm sewers draining the facility. Each plan shall identify all activities and significant materials which may potentially be significant pollutant sources. The plan shall include, at a minimum:

C. Specific Limitations and Self-Monitoring Requirements (Continued)

15. c. 2) a) Drainage.

- (i) A site map indicating an outline of the portions of the drainage area of each storm water outfall that are within the facility boundaries, each existing structural control measure to reduce pollutants in storm water runoff, surface water bodies, locations where significant materials are exposed to precipitation, locations where major spills or leaks identified under Part I.C.15.c.2).c) (Spills and Leaks) of this permit have occurred, and the locations of the following activities where such activities are exposed to precipitation: fueling stations, vehicle and equipment maintenance and/or cleaning areas, loading/unloading areas, locations used for the treatment, storage or disposal of wastes, liquid storage tanks, processing areas and storage areas.
 - (ii) For each area of the facility that generates storm water discharges associated with industrial activity with a reasonable potential for containing pollutants, a prediction of the direction of flow, and an identification of the types of pollutants which are likely to be present in storm water discharges associated with industrial activity. Factors to consider include the toxicity of chemical; quantity of chemicals used, produced or discharged; the likelihood of contact with storm water; and history of significant leaks or spills of toxic or hazardous pollutants. Flows with a significant potential for causing erosion shall be identified.
- b) Inventory of Exposed Materials - An inventory of the types of materials handled at the site that potentially may be exposed to precipitation. Such inventory shall include a narrative description of significant materials that have been handled, treated, stored or disposed in a manner to allow exposure to storm water between the time of 3 years prior to the date of the issuance of this permit and the present; method and location of on-site storage or disposal; materials management practices employed to minimize contact of materials with storm water runoff between the time of 3 years prior to the date of the issuance of this permit and the present; the location and a description of existing structural and non-structural control measures to reduce pollutants in storm water runoff; and a description of any treatment the storm water receives. Note: The limitation of three (3) years prior to the date of the issuance of this permit does not apply to radioactive materials.
- c) Spills and Leaks - A list of significant spills and significant leaks of toxic, hazardous or radioactive pollutants that have occurred at areas that are exposed to precipitation or that otherwise drain to a storm water conveyance at the facility after the date of 3 years prior to the effective date of this permit. Such list shall be updated as appropriate during the term of the permit. Note: The limitation of three (3) years prior to the date of the issuance of this permit does not apply to radioactive materials.

C. Specific Limitations and Self-Monitoring Requirements (Continued)

15. c. 2) d) Sampling Data - A summary of existing discharge sampling data describing pollutants in storm water discharges from the facility, including a summary of sampling data collected during the term of this permit.
- e) Risk Identification and Summary of Potential Pollutant Sources - A narrative description of the potential pollutant sources from the following activities: loading and unloading operations; outdoor storage activities; outdoor manufacturing or processing activities; significant dust or particulate generating processes; and on-site waste disposal practices. The description shall specifically list any significant potential source of pollutants at the site and for each potential source, any pollutant or pollutant parameter (e.g., radioactive materials, acids, solvents, etc.) of concern shall be identified.
- 3) Measures and Controls - The permittees shall develop a description of storm water management controls appropriate for the Rocky Flats Environmental Technology Site, and implement such controls. The appropriateness and priorities of controls in a plan shall reflect identified potential sources of pollutants at the facility. The description of storm water management controls shall address the following minimum components, including a schedule for implementing such controls:
- a) Good Housekeeping - Good housekeeping requires the maintenance of areas which may contribute pollutants to storm waters discharges in a clean, orderly manner.
- b) Preventive Maintenance - A preventive maintenance program shall involve timely inspection and maintenance of storm water management devices (e.g., cleaning oil/water separators, catch basins) as well as inspecting and testing facility equipment and systems to uncover conditions that could cause breakdowns or failures resulting in discharges of pollutants to surface waters, and ensuring appropriate maintenance of such equipment and systems.
- c) Spill Prevention and Response Procedures - Areas where potential spills which can contribute pollutants to storm water discharges can occur, and their accompanying drainage points shall be identified clearly in the storm water pollution prevention plan. Where appropriate, specifying material handling procedures, storage requirements, and use of equipment such as diversion valves in the plan should be considered. Procedures for cleaning up spills shall be identified in the plan and made available to the appropriate personnel. The necessary equipment to implement a clean up should be available to personnel.

C. Specific Limitations and Self-Monitoring Requirements (Continued)

15. c. 3) d) Inspections - In addition to or as part of the comprehensive site evaluation required under Part I.C.15.c.4) of this permit, qualified facility personnel shall be identified to inspect designated equipment and areas of the facility at appropriate intervals of no less than one time each year as specified in the plan. A set of tracking or follow-up procedures shall be used to ensure that appropriate actions are taken in response to the inspections. Records of inspections shall be maintained.
- e) Employee Training - Employee training programs shall inform personnel responsible for implementing activities identified in the storm water pollution prevention plan or otherwise responsible for storm water management at all levels of responsibility of the components and goals of the storm water pollution prevention plan. Training should address topics such as spill response, good housekeeping and material management practices. The pollution prevention plan shall identify periodic dates for such training.
- f) Record keeping and Internal Reporting Procedures - A description of incidents (such as spills, or other discharges), along with other information describing the quality and quantity of storm water discharges shall be included in the plan required under this part. Inspections and maintenance activities shall be documented and records of such activities shall be incorporated into the plan.
- g) Non-Storm Water Discharges
- (i) The permittees shall continue to conduct an ongoing study to identify non-storm water discharges to the storm water drainage system. This study must be complete by six months after the effective date of this permit, and include a certification that all potential non-storm water discharges have been tested or evaluated. Certifications shall be signed in accordance with Part IV.G of this permit. The certification shall include the identification of potential significant sources of non-storm water at the site, a description of the results of any test and/or evaluation for the presence of non-storm water discharges, the evaluation criteria, or testing method used, the date of any testing and/or evaluation, and the on-site drainage points that were directly observed during the test. The study and certification shall be attached to the storm water pollution prevention plan upon completion.

C. Specific Limitations and Self-Monitoring Requirements (Continued)

15. c. 3) g) (ii) Uncontaminated non-storm water may be discharged through the storm water outfalls. For purposes of this permit "uncontaminated water" is considered water which meets the applicable water quality standards of Segment 5 of the Big Dry Creek Basin. All contaminated non-storm water must follow the provisions of part I.C.13., Contaminated Non-Storm Water Discharges at Rocky Flats Environmental Technology Site.

(iii) Except for flows from fire fighting activities, sources of non-storm water are combined with storm water discharges associated with industrial activity of RFETS and must be identified in the plan. The plan shall identify and ensure the implementation of appropriate pollution prevention measures for the non-storm water component(s) of the discharge.

h) Sediment and Erosion Control - The plan shall identify areas which, due to topography, activities, or other factors, have a high potential for significant soil erosion, and identify structural, vegetative, and/or stabilization measures to be used to limit erosion.

i) Management of Runoff - The plan shall contain a narrative consideration of the appropriateness of traditional storm water management practices (practices other than those which control the generation or source(s) of pollutants) used to divert, infiltrate, reuse, or otherwise manage storm water runoff in a manner that reduces pollutants in storm water discharges from the site. The plan shall provide the measures that the permittees determine to be reasonable and appropriate and these measures shall be implemented and maintained. The potential of various sources at the Rocky Flats Environmental Technology Site to contribute pollutants to storm water discharges associated with industrial activity (see Part I.C.15.c.2.) shall be considered when determining reasonable and appropriate measures. Appropriate measures may include: vegetative swales and practices, reuse of collected storm water (such as for a process or as an irrigation source), inlet controls (such as oil/water separators), snow management activities, infiltration devices, and wet detention/retention devices.

4) Comprehensive Site Compliance Evaluation - Qualified personnel shall conduct site compliance evaluations at appropriate intervals specified in the plan, but, in no case less than once a year. Such evaluations shall provide:

C. Specific Limitations and Self-Monitoring Requirements (Continued)

15. c. 4) a) Areas contributing to a storm water discharge associated with industrial activity shall be visually inspected for evidence of, or the potential for, pollutants entering the drainage system. Measures to reduce pollutant loadings shall be evaluated to determine whether they are adequate and properly implemented in accordance with the terms of the permit or whether additional control measures are needed. Structural storm water management measures, sediment and erosion control measures, and other structural pollution prevention measures identified in the plan shall be observed to ensure that they are operating correctly. A visual inspection of equipment needed to implement the plan, such as spill response equipment, shall be made.
- b) The analytical results from the storm water monitoring required under Part I.C.16. shall be evaluated with the objective of determining whether or not the storm water discharges from the plant site are causing or contributing to water quality problems in segment 5 of the Big Dry Creek Basin. Water quality data for the ponds may be used to supplement the evaluation. To the extent that data are available, the evaluation shall include data for the previous 12 months. Earlier data may be included to give an indication of trends. The data should also be evaluated in terms of giving an indication of whether or not the plan is effective in minimizing the discharge of pollutants or whether additional control measures are needed.
- c) Based on the results of the visual inspection (Part I.C.15.c.4)a) above) and the evaluation of the monitoring data (Part I.C.15.c.4)b) above), the plan shall be revised as appropriate. The revision shall include, as appropriate, the description of potential pollutant sources identified in the plan and pollution prevention measures and controls identified in the plan. The revision shall be completed within four (4) weeks of the such inspection and shall provide for implementation of any changes to the plan in a timely manner, but in no case more than 12 weeks after the inspection unless additional time has been approved by the permit issuing authority.
- d) A report summarizing the scope of the inspection, personnel making the inspection, the date(s) of the inspection, major observations relating to the implementation of the storm water pollution prevention plan, and actions taken in accordance with Part I.C.15.c.4)b) (above) of the permit shall be made and retained as part of the storm water pollution prevention plan for at least one year after coverage under this permit terminates. The report shall identify any incidents of non-compliance. Where a report does not identify any incidents of non-compliance, the report shall contain a certification that the facility is in compliance with the storm water pollution prevention plan and this permit.

C. Specific Limitations and Self-Monitoring Requirements (Continued)

15. c. 5) Consistency with other plans - Storm water pollution prevention plans may reflect requirements for spill prevention control and countermeasure (SPCC) plans developed for RFETS under section 311 of the CWA; best management practices plans; or other environmental control plans prepared for RFETS. Provided such requirement(s) are incorporated into the storm water pollution prevention plan, or referenced by specific document title, volume, heading, and page number(s). All referenced documents must be available for review and inspection upon request.
- 6) Additional requirements for storm water discharges associated with industrial activity from facilities subject to EPCRA Section 313 requirements. In addition to the requirements of Part I.C.15.c.1) through 4) of this permit and other applicable conditions of this permit, storm water pollution prevention plans for facilities subject to reporting requirements under EPCRA Section 313 for chemicals which are classified as 'Section 313 water priority chemicals' in accordance with the definition in PART I.A of this permit, shall describe and ensure the implementation of practices which are necessary to provide for conformance with the following guidelines:
- a) In areas where Section 313 water priority chemicals are stored, processed or otherwise handled, appropriate containment, drainage control and/or diversionary structures shall be provided. At a minimum, one of the following preventive systems or its equivalent shall be used:
- (i) Curbing, culverting, gutters, sewers or other forms of drainage control to prevent or minimize the potential for storm water run-off to come into contact with significant sources of pollutants; or,
- (ii) Roofs, covers or other forms of appropriate protection to prevent storage piles from exposure to storm water, and wind.
- b) In addition to the minimum standards listed under Part I.C.15.c.6)a) of this permit, the storm water pollution prevention plan shall include a complete discussion of measures taken to conform with the following applicable guidelines, other effective storm water pollution prevention procedures, and applicable State rules, regulations and guidelines:
- (i) Liquid storage areas where storm water comes into contact with any equipment, tank, container, or other vessel used for Section 313 water priority chemicals.
- A) No tank or container shall be used for the storage of a Section 313 water priority chemical unless its material and construction are compatible with the material stored and conditions of storage such as pressure and temperature, etc.

C. Specific Limitations and Self-Monitoring Requirements (Continued)

15. c. 6) b) (i) B) Liquid storage areas for Section 313 water priority chemicals shall be operated to minimize discharges of Section 313 chemicals. Appropriate measures to minimize discharges of Section 313 chemicals may include secondary containment provided for at least the entire contents of the largest single tank plus sufficient freeboard to allow for precipitation, a comprehensive spill contingency and integrity testing plan, and/or other equivalent measures.
- (ii) Material storage areas for Section 313 water priority chemicals other than liquids. Material storage areas for Section 313 water priority chemicals other than liquids which are subject to runoff, leaching, or wind shall incorporate drainage or other control features which will minimize the discharge of Section 313 water priority chemicals by reducing storm water contact with Section 313 water priority chemicals.
- (iii) Truck and rail car loading and unloading areas for liquid Section 313 water priority chemicals. Truck and rail car loading and unloading areas for liquid Section 313 water priority chemicals shall be operated to minimize discharges of Section 313 water priority chemicals. Protection such as overhangs or door skirts to enclose trailer ends at truck loading/unloading docks shall be provided as appropriate. Appropriate measures to minimize discharges of Section 313 chemicals may include: the placement and maintenance of drip pans (including the proper disposal of materials collected in the drip pans) where spillage may occur (such as hose connections, hose reels and filler nozzles) for use when making and breaking hose connections; a comprehensive spill contingency and integrity testing plan; and/or other equivalent measures.
- (iv) Areas where Section 313 water priority chemicals are transferred, processed or otherwise handled. Processing equipment and materials handling equipment shall be operated so as to minimize discharges of Section 313 water priority chemicals. Materials used in piping and equipment shall be compatible with the substances handled. Drainage from process and materials handling areas shall minimize storm water contact with section 313 water priority chemicals. Additional protection such as covers or guards to prevent exposure to wind, spraying or releases from pressure relief vents from causing a discharge of Section 313 water priority chemicals to the drainage system shall be provided as appropriate. Visual inspections or leak tests shall be provided for overhead piping conveying Section 313 water priority chemicals without secondary containment.

C. Specific Limitations and Self-Monitoring Requirements (Continued)

15. c. 6) b) (v) Discharges from areas covered by paragraphs I.C.15.c.6)b)(i), (ii), (iii) or (iv).

- A) Drainage from areas covered by paragraphs I.C.15.c.6)b)(i), (ii), (iii) or (iv) of this Part should be restrained by valves or other positive means to prevent the discharge of a spill or other excessive leakage of Section 313 water priority chemicals. Where containment units are employed, such units may be emptied by pumps or ejectors; however, these shall be manually activated.
- B) Flapper-type drain valves shall not be used to drain containment areas. Valves used for the drainage of containment areas should, as far as is practical, be of manual, open-and-closed design.
- C) If facility drainage is not engineered as above, the final discharge of all in-facility storm sewers shall be equipped to be equivalent with a diversion system that could, in the event of an uncontrolled spill of Section 313 water priority chemicals, return the spilled material to the facility.
- D) Records shall be kept of the frequency and estimated volume (in gallons) of discharges from containment areas.

(vi) Facility site runoff other than from areas covered by I.C.15.c.6)b)(i), (ii), (iii) or (iv). Other areas of the facility (those not addressed in paragraphs I.C.15.c.6)b)(i), (ii), (iii) or (iv), from which runoff which may contain Section 313 water priority chemicals or spills of Section 313 water priority chemicals could cause a discharge shall incorporate the necessary drainage or other control features to prevent discharge of spilled or improperly disposed material and ensure the mitigation of pollutants in runoff or leachate.

C. Specific Limitations and Self-Monitoring Requirements (Continued)

15. c. 6) b) (vii) Preventive maintenance and housekeeping. All areas of the facility shall be inspected at specific intervals identified in the plan for leaks or conditions that could lead to discharges of Section 313 water priority chemicals or direct contact of storm water with raw materials, intermediate materials, waste materials or products. In particular, facility piping, pumps, storage tanks and bins, pressure vessels, process and material handling equipment, and material bulk storage areas shall be examined for any conditions or failures which could cause a discharge. Inspection shall include examination for leaks, wind blowing, corrosion, support or foundation failure, or other forms of deterioration or noncontainment. Inspection intervals shall be specified in the plan and shall be based on design and operational experience. Different areas may require different inspection intervals. Where a leak or other condition is discovered which may result in significant releases of Section 313 water priority chemicals to waters of the United States, action to stop the leak or otherwise prevent the significant release of Section 313 water priority chemicals to waters of the United States shall be immediately taken or the unit or process shut down until such action can be taken.
- (viii) When a leak or noncontainment of a Section 313 water priority chemical has occurred, contaminated soil, debris, or other material must be promptly removed and disposed in accordance with Federal, State, and local requirements and as described in the plan.
- (ix) Facility security. Facilities shall have the necessary security systems to prevent accidental or intentional entry which could cause a discharge. Security systems described in the plan shall address fencing, lighting, vehicular traffic control, and securing of equipment and buildings.

C. Specific Limitations and Self-Monitoring Requirements (Continued)

15. c. 6) b) (x) Training. Facility employees and contractor personnel that work in areas where Section 313 water priority chemicals are use or stored shall be trained in and informed of preventive measures at the facility. Employee training shall be conducted at intervals specified in the plan, but not less than once per year, in matters of pollution control laws and regulations, and in the storm water pollution prevention plan and the particular features of the facility and its operation which are designed to minimize discharges of Section 313 water priority chemicals. The plan shall designate a person who is accountable for spill prevention at the facility and who will set up the necessary spill emergency procedures and reporting requirements so that spills and emergency releases of Section 313 water priority chemicals can be isolated and contained before a discharge of a Section 313 water priority chemical can occur. Contractor or temporary personnel shall be informed of facility operation and design features in order to prevent discharges or spills from occurring.
- (xi) Engineering Certification. - The storm water pollution prevention plan for a facility subject to EPCRA Section 313 requirements for chemicals which are classified as 'Section 313 water priority chemicals' shall be reviewed by a Registered Professional Engineer and certified to by such Professional Engineer. A Registered Professional Engineer shall recertify the plan every 3 years thereafter or as soon as practicable after significant modification are made to the facility. By means of these certifications the engineer, having examined the facility and being familiar with the provisions of this Part, shall attest that the storm water pollution prevention plan has been prepared in accordance with good engineering practices. Such certifications shall in no way relieve the owner or operator of a facility covered by the plan of their duty to prepare and fully implement such plan.

7) Additional Requirements for Salt Storage.

Storage piles of salt used for deicing or other commercial or industrial purposes and which generate a storm water discharge associated with industrial activity which is discharged to a waters of the United States shall be enclosed or covered to prevent exposure to precipitation, except for exposure resulting from adding or removing materials from the pile.

Dischargers shall demonstrate compliance with this provision as expeditiously as practicable, but in no event later than two years after the effective date of this permit. Piles do not need to be enclosed or covered where storm water from the pile is not discharged to waters of the United States.

C. Specific Limitations and Self-Monitoring Requirements (Continued)

16. Monitoring Requirements for Storm Water Discharges

The permittees shall monitor storm water discharges in accordance with the Integrated Monitoring Plan developed pursuant to RFCA. The event-related and flow proportioned sampling currently required under the IMP targets the same discharge points and constituents of concern identified in this permit, with provisions for more specific sub-basin sampling under certain circumstances. This approach was designed to serve a variety of needs, and should adequately support the SWPPP under most circumstances. In the event that additional monitoring needs are identified as necessary to support the SWPPP these shall be incorporated into the RFETS Integrated Monitoring Plan during the periodic update process, as appropriate.

II. MONITORING, RECORDING AND REPORTING REQUIREMENTS

- A. Representative Sampling. Samples taken in compliance with the monitoring requirements established under PART I shall be collected from the effluent stream prior to discharge into the receiving waters. Samples and measurements shall be representative of the volume and nature of the monitored discharge as described in Section I.A and I.C of this permit. Sludge samples shall be collected at a location representative of the quality of sludge immediately prior to use/disposal/storage practice.
- B. Monitoring Procedures. Monitoring must be conducted according to test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in this permit. Sludge monitoring procedures shall be those specified in 40 CFR 503, 40 CFR 136 or as specified in the permit.
- C. Penalties for Tampering. The Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate, any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$10,000 or by imprisonment for not more than two years or both. Second conviction is punishable by a fine of not more than \$20,000 or by imprisonment of not more than four years, or both.
- D. Reporting of Monitoring Results. Effluent monitoring results obtained during the previous month shall be summarized in the Monthly Report and reported on a Discharge Monitoring Report Form (EPA No. 3320-1), postmarked no later than the 28th day of the month following the completed reporting period.
1. Monthly reporting: month shall be summarized and reported on one Discharge Monitoring Report Form.
 2. Quarterly reporting, one Discharge Monitoring Report (DMR) for each quarter: 3 months shall be summarized and reported on one Discharge Monitoring Report Form.
 3. Semiannual reporting (January-June; July-December), one DMR for each 6-month period: Semiannual data (6 months) shall be summarized by month and reported on a separate Discharge Monitoring Report Form. Submit every 6 months.
 4. Annual reporting, one DMR for the year: 12 months shall be summarized and reported on one Discharge Monitoring Report Form.

If no discharge occurs during the reporting period, "no discharge" shall be reported. Until further notice, sludge monitoring results may be reported in the testing laboratory's normal format (there is no EPA standard form at this time), but should be on letter size pages. Whole effluent toxicity (biomonitoring) results must be reported on the most recent version of EPA Region VIII's Guidance For Whole Effluent Reporting. Legible copies of these, and all other reports required herein, shall be signed and certified in accordance with Part IV.G, Signatory Requirements, and submitted to the ARA, Office of Enforcement, Compliance and Environmental Justice, and the Colorado Department of Public Health and Environment at the following addresses:

D. Reporting of Monitoring Results. (Continued)

original to:

U.S. EPA, Region VIII
Office of Enforcement, Compliance and Environmental Justice
Planning and Targeting (8ENF-PT)
999 18th Street, Suite 300
Denver, Colorado 80202-2466

copy to:

Colorado Department of Public Health and Environment
WQCD-PE-B2
4300 Cherry Creek Drive South
Denver, Colorado 80222-1530

- E. Additional Monitoring by the Permittees. If the permittees monitor any pollutant more frequently than required by this permit, using test procedures approved under 40 CFR 136, 40 CFR 503, or as specified in this permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR. Such increased frequency shall also be indicated.
- F. Records Contents. Records of monitoring information shall include:
1. The date, exact place, and time of sampling or measurements;
 2. The initials or name(s) of the individual(s) who performed the sampling or measurements;
 3. The date(s) analyses were performed;
 4. The time(s) analyses were initiated;
 5. The initials or name(s) of individual(s) who performed the analyses;
 6. References and written procedures, when available, for the analytical techniques or methods used; and,
 7. The results of such analyses, including the bench sheets, instrument readouts, computer disks or tapes, etc., used to determine these results.
- G. Retention of Records. The permittees shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports and required by this permit, and records of all data used to complete the application for this permit, for a period of at least three years from the date of the sample, measurement, report or application. Records of monitoring required by this permit related to sludge use and disposal activities must be kept at least five years (or longer as required by 40 CFR 503). This period may be extended by request of the Director at any time. Data collected on site, data used to prepare the DMR, copies of Discharge Monitoring Reports, and a copy of this NPDES permit must be maintained on site.

H. Twenty-four Hour Notice of Noncompliance Reporting.

1. The permittees shall report any noncompliance of this permit or any other discharge that may endanger health or the environment as soon as possible, but no later than twenty-four (24) hours from the time the permittees first became aware of the circumstances. The report shall be made to the EPA, Region VIII, Preparedness, Assessment and Emergency Response Program at (303) 312-6962 and the State of Colorado at (303) 756-4455.
2. In addition, following occurrences of noncompliance shall be reported by telephone, using the numbers listed above, within 24 hours from the time the permittees first became aware of the problem:
 - a. Any unanticipated bypass which exceeds any effluent limitation in the permit (See Part III.G., Bypass of Treatment Facilities);
 - b. Any upset which exceeds any effluent limitation in the permit (See Part III.H., Upset Conditions); or,
 - c. Violation of a maximum daily discharge limitation for any of the pollutants listed in the permit to be reported within 24 hours.
3. A written submission shall also be provided to the U.S. EPA, Region VIII, Office of Enforcement, Compliance and Environmental Justice and to the State of Colorado within five days of the time that the permittees become aware of the circumstances. The written submission shall contain:
 - a. A description of the noncompliance and its cause;
 - b. The period of noncompliance, including exact dates and times;
 - c. The estimated time noncompliance is expected to continue if it has not been corrected; and,
 - d. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.
4. The Director may waive the written report on a case-by-case basis if the oral report has been received within 24 hours by the Technical Enforcement Program, Office of Enforcement, Compliance and Environmental Justice, Denver, Colorado, by phone, (303) 312-6720.
5. Reports shall be submitted to the addresses in Part II.D, Reporting of Monitoring Results.

- I. Other Noncompliance Reporting. Instances of noncompliance not required to be reported within 24 hours shall be reported at the time that monitoring reports for Part II.D. are submitted. The reports shall contain the information listed in Part II.H.3.
- J. Inspection and Entry. The permittees shall allow the Director of the State of Colorado Water Quality Control Division or the Regional Administrator, or authorized representative (including an authorized contractor acting as a representative of the Administrator) upon presentation of proper credentials and other documents as may be required by law, to:
 1. Enter upon the permittees' premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
 2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
 3. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and,
 4. Sample or monitor at reasonable times, for the purpose of assuring permit compliance or as otherwise authorized by the Act, any substances or parameters at any location.

III. COMPLIANCE RESPONSIBILITIES

A. Duty to Comply. The permittees must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. The permittees shall give the Director advance notice of any planned changes at the permitted facility or of an activity which may result in permit noncompliance. It is recognized that each of the permittees has primary responsibilities in the operation of RFETS. However, it is also recognized that the primary responsibilities of each permittee are interrelated with the primary responsibilities of the other permittees. The permittees are each jointly and severally liable for compliance with all terms and conditions of this permit. The permit issuing authority may take enforcement actions as appropriate against either DOE and/or K-H and/or RFCSS or all.

B. Penalties for Violations of Permit Conditions.

The Act provides for specified civil and criminal penalties for violations of its provisions. However, the Federal Civil Penalties Inflation Adjustment Act of 1990, as amended by the Debt Collection Improvement Act of 1996, requires EPA to adjust the civil monetary penalties for inflation on a periodic basis. EPA adjusted its civil monetary penalties on December 31, 1996 (61 Fed. Reg. 69359-69365), with technical corrections and additions published on March 20, 1997 (62 Fed. Reg. 13514-13517) and June 27, 1997 (62 Fed. Reg. 35037-35041). The resulting civil and criminal penalties, as of July 28, 1997, for violations of the Act (including permit conditions) are given below:

1. Any person who violates section 301, 302, 306, 307, 308, 318 or 405 of the Act, or any permit condition or limitation implementing any such sections in a permit issued under section 402, or any requirement imposed in a pretreatment program approved under sections 402(a)(3) or 402(b)(8) of the Act, is subject to a civil penalty not to exceed \$27,500 per day for each violation. The Clean Water Act provides that any person who *negligently* violates sections 301, 302, 306, 307, 308, 318, or 405 of the Act, or any condition or limitation implementing any of such sections in a permit issued under section 402 of the Act, or any requirement imposed in a pretreatment program approved under section 402(a)(3) or 402(b)(8) of the Act, is subject to criminal penalties of \$2,500 to \$25,000 per day of violation, or imprisonment of not more than 1 year, or both. In the case of a second or subsequent conviction for a negligent violation, a person shall be subject to criminal penalties of not more than \$50,000 per day of violation, or by imprisonment of not more than 2 years, or both. Any person who *knowingly* violates such sections, or such conditions or limitations is subject to criminal penalties of \$5,000 to \$50,000 per day of violation, or imprisonment for not more than 3 years, or both. In the case of a second or subsequent conviction for a knowing violation, a person shall be subject to criminal penalties of not more than \$100,000 per day of violation, or imprisonment of not more than 6 years, or both. Any person who knowingly violates section 301, 302, 303, 306, 307, 308, 318 or 405 of the Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of the Act, and who knows at that time that he thereby places another person in imminent danger of death or serious bodily injury, shall, upon conviction, be subject to a fine of not more than \$250,000 or imprisonment of not more than 15 years, or both. In the case of a second or subsequent conviction for a knowing

B. Penalties for Violations of Permit Conditions. (Continued)

endangerment violation, a person shall be subject to a fine of not more than \$500,000 or by imprisonment of not more than 30 years, or both. An organization, as defined in section 309(c)(3)(B)(iii) of the CWA, shall, upon conviction of violating the imminent danger provision, be subject to a fine of not more than \$1,000,000 and can be fined up to \$2,000,000 for second or subsequent convictions.

2. Any person may be assessed an administrative penalty by the Administrator for violating section 301, 302, 306, 307, 308, 318 or 405 of this Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of this Act. Administrative penalties for Class I violations are not to exceed \$11,000 per violation, with the maximum amount of any Class I penalty assessed not to exceed \$27,500. Penalties for Class II violations are not to exceed \$11,000 per day for each day during which the violation continues, with the maximum amount of any Class II penalty not to exceed \$137,500.

- C. Need to Halt or Reduce Activity not a Defense. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
- D. Duty to Mitigate. The permittees shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.
- E. Proper Operation and Maintenance. The permittees shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittees to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by a permittees only when the operation is necessary to achieve compliance with the conditions of the permit. However, the permittees shall operate, as a minimum, one complete set of each main line unit treatment process whether or not this process is needed to achieve permit effluent compliance.
- F. Removed Substances. Collected screenings, grit, solids, sludge, or other pollutants removed in the course of treatment shall be buried or disposed in a manner consistent with all applicable federal and state regulations (i.e., 40 CFR 257, 40 CFR 258, 40 CFR 503) and in a manner so as to prevent any pollutant from entering any waters of the United States or creating a health hazard. Sludge/digester supernatant and filter backwash shall not be directly blended with or enter either the final plant discharge and/or waters of the United States.

G. Bypass of Treatment Facilities.

1. Bypass not exceeding limitations. The permittees may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of paragraphs 2. and 3. of this section.
2. Notice:
 - a. Anticipated bypass. If the permittees know in advance of the need for a bypass, it shall submit prior notice, if possible at least 10 days before the date of the bypass to the U.S. EPA, Water Management Division, Technical Enforcement Program and to the Colorado Department of Public Health and Environment.
 - b. Unanticipated bypass. The permittees shall submit notice of an unanticipated bypass as required under Part II.H. Twenty-four Hour Reporting to the U.S. EPA, Technical Enforcement Program and to the State of Colorado.
3. Prohibition of bypass.
 - a. Bypass is prohibited and the Director may take enforcement action against a permittee for a bypass, unless:
 - 1) The bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
 - 2) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, maintenance during normal periods of equipment downtime, or required off-line tankage capacity is exceeded. Ponds B-1 and B-2 are only to be used if the tank capacity is exceeded. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgement to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and,
 - 3) The permittees submitted notices as required under paragraph 2. of this section.
 - b. The Director may approve an anticipated bypass, after considering its adverse effects, if the Director determines that it will meet the three conditions listed above in paragraph 3.a. of this section.

H. Upset Conditions

1. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with technology based permit effluent limitations if the requirements of paragraph 2. of this section are met. All determinations made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, are final administrative actions, subject to judicial review (i.e., Permittees will have the opportunity for a judicial determination on any claim of upset only in an enforcement action brought for noncompliance with technology-based permit effluent limitations).
2. Conditions necessary for a demonstration of upset. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
 - a. An upset occurred and that the permittees can identify the cause(s) of the upset;
 - b. The permitted facility was at the time being properly operated;
 - c. The permittee submitted notice of the upset as required under Part II.H., Twenty-four Hour Notice of Noncompliance Reporting;
 - d. The permittee complied with any remedial measures required under Part III.D., Duty to Mitigate; and
 - e. The upset which occurred was not the result of receipt at the STP of untreatable waste or sanitary waste mixed with materials not routinely treated in the STP.
3. Burden of proof. In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.

I. Notification and Reporting on Non-Sanitary Wastewaters and Infiltration/Inflow

The permittees shall give notice to the Director as soon as possible of planned alterations or additions of non-sanitary waste streams going to the sewage treatment plant or Building 374 that could significantly change the nature or quantity of pollutants discharged. No changes shall be made until approval is granted by the Director.

In addition, the permittees shall submit an annual report to both EPA and the State of Colorado summarizing the status of non-sanitary wastewaters going to the sewage treatment plant and to Building 374 during the calendar year. The wastewaters shall be listed separately for the sewage treatment plant and for Building 374. The report shall list the building from which the wastewater originates; briefly describe the nature of the wastewater; provide a listing of the pollutants of concern; briefly describe any pretreatment of the wastewater; and give the approximate annual volume of the wastewater, in gallons. This would include routine internal waste streams such as blowdown water from cooling towers in which chemical additives other than chlorine, inorganic acids, and inorganic bases (e.g., sulfuric acid, sodium hydroxide, etc.) are used. The annual report shall be in the form of a letter with attachments and shall be submitted by no later than April 1 of the following year. This reporting shall include an estimate of infiltration and inflow rates in the collection system, and an evaluation of the possible detrimental effect of this dilution on the treatment system performance.

IV. GENERAL REQUIREMENTS

- A. Planned Changes. The permittees shall give notice to the Director as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:
1. The alteration or addition could significantly change the nature or increase the quantity of pollutant discharged. This notification applies to pollutants which are not subject to effluent limitations in the permit; or,
 2. There are any planned substantial changes to the existing sewage sludge facilities, the manner of its operation, or to current sewage sludge management practices of storage and disposal. The permittees shall give the Director notice of any planned changes at least 180 days prior to their implementation.
 3. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source.
- B. Anticipated Noncompliance. The permittees shall give advance notice to the Director of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.
- C. Permit Actions. This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittees for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.
- D. Duty to Reapply. If the permittees wish to continue an activity regulated by this permit after the expiration date of this permit, the permittees must apply for and obtain a new permit. The application should be submitted at least 180 days before the expiration date of this permit.
- E. Duty to Provide Information. The permittees shall furnish to the Director, within a reasonable time, any information which the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The permittees shall also furnish to the Director, upon request, copies of records required to be kept by this permit.
- F. Other Information. When the permittees become aware that they failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or any report to the Director, they shall promptly submit such facts or information.
- G. Signatory Requirements. All applications, reports or information submitted to the Director shall be signed and certified.
1. All permit applications shall be signed by either principal executive officers or ranking elected officials.

G. Signatory Requirements. (Continued)

2. All reports required by the permit and other information requested by the Director shall be signed by persons described above or by duly authorized representatives of those persons. A person is a duly authorized representative only if:
 - a. The authorization is made in writing by a person described above and submitted to the Director; and,
 - b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility, such as the position of plant manager, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.)
3. Changes to authorization. If an authorization under paragraph IV.G.2. is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of paragraph IV.G.2. must be submitted to the Director prior to or together with any reports, information, or applications to be signed by an authorized representative.
4. Certification. Any person signing a document under this section shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

- H. Penalties for Falsification of Reports. The Act provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than six months per violation, or by both.
- I. Availability of Reports. Except for data determined to be confidential under 40 CFR Part 2, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the Colorado Department of Public Health and Environment and the Director. As required by the Act, permit applications, permits and effluent data shall not be considered confidential.

- J. Oil and Hazardous Substance Liability. Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittees from any responsibilities, liabilities, or penalties to which the permittees are or may be subject under Section 311 of the Act.
- K. Property Rights. The issuance of this permit does not convey any property rights of any sort, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations.
- L. Severability. The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.
- M. Transfers. This permit may be automatically transferred to new permittees if:
1. The current permittees notify the Director at least 30 days in advance of the proposed transfer date;
 2. The notice includes a written agreement between the existing and new permittees containing a specific date for transfer of permit responsibility, coverage, and liability between them; and,
 3. The Director does not notify the existing permittees and the proposed new permittees of his or her intent to modify, or revoke and reissue the permit. If this notice is not received, the transfer is effective on the date specified in the agreement mentioned in paragraph 2. above.
- N. State Laws. Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittees from any responsibilities, liabilities, or penalties established pursuant to any applicable state law or regulation under authority preserved by Section 510 of the Act.
- O. Permit Modifications. This permit may be modified for any of the reasons set forth in 40 CFR Section 122.62(a) and, in particular, if one or more of the following events occurs:
1. Water Quality Standards: The water quality standards of the receiving water(s) to which the permittees discharge are modified in such a manner as to require different effluent limits than contained in this permit.
 2. Water Quality Violations: Water quality monitoring indicates that discharges from the STP are causing violations of applicable water quality standards in segments of Walnut or Big Dry Creeks.
 3. Wasteload Allocation: A wasteload allocation is developed and approved by the State and/or EPA for incorporation in this permit.

O. Permit Modifications. (Continued)

4. Water Quality Management Plan: A revision to the water quality management plan adopted pursuant to 33 USC 1288 is approved and adopted by the area-wide waste management agency which calls for alterations in discharge locations or methods (as required to protect habitats, species or other basin features), or requires different effluent limitations from those contained in this permit.
 5. Sewage Sludge: There have been substantial changes (or such changes are planned) in sludge use or disposal practices; applicable management practices or numerical limitations for pollutants in sludge have been promulgated which are more stringent than the requirements in this permit; and/or it has been determined that the permittees' sludge use or disposal practices do not comply with existing applicable state or federal regulations.
 6. Process Modifications: Planning, monitoring, or other evidence indicates that changing on-site activities may result in influent loading of a type or concentration that is incompatible with the existing treatment process or exceeds the STP's treatment capabilities.
 7. Increased Nitrogen Loading: This permit may be modified (following proper administrative procedures) to include appropriate effluent limitations or other appropriate requirements if the concentration of the sum of nitrate plus nitrite plus ammonia at STP1 exceeds historic levels of total nitrogen at that location.
- P. Permit As A Shield: Except as provided in 33 U.S.C. § 1342(k), nothing in this permit shall be construed as a shield to the permittees for any legal requirements under any environmental law, including the need to perform response actions under RCRA and CERCLA.